



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 7

11201 Renner Boulevard  
Lenexa, Kansas 66219

DEC 16 2014

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Article No.: 7013 3020 0001 1645 6416

Byron F. Taylor  
Sidley Austin LLP  
One South Dearborn  
Chicago, Illinois 60603

Re: Frontier El Dorado Refining LLC/Clean Air Act Section 114 Request

Dear Mr. Taylor:

As discussed with Parthy Evans November 20<sup>th</sup> and with you December 8<sup>th</sup>, Frontier did not provide full and complete answers to many of the questions set forth in the second response to the CAA Section 114 Request, dated June 18, 2014. The Clean Air Act Section 114 authorizes the EPA to require Frontier to provide information necessary for the purpose of carrying out any provision of the Act. A full and complete response to any such information request is **required**. Although Frontier has withheld certain documents from its response due to statute of limitations, this is not a basis under the Clean Air Act Section 114 for refusing to respond. As such, the EPA expects that Frontier will provide all of the information requested, in accordance with the questions in Attachment 1, no later than January 16, 2015.

As we also discussed on December 8<sup>th</sup>, the U.S. EPA is extending the due date for the third submittal until January 16, 2015, so that the third submittal will not have the same significant deficiencies as the second submittal. We are continuing to review the information submitted by Frontier and reserve the right in the future to require Frontier to address other deficiencies.

Also enclosed is a statement of certification that an authorized representative for Frontier must sign for the entire Section 114 Request response. Although a certification is set forth in the Section 114 Request cover letter, please have an authorized representative sign the enclosed statement.

If you have any questions, please do not hesitate to contact me at 913-551-7448 or [murray.julie@epa.gov](mailto:murray.julie@epa.gov).

Sincerely,

Julie L. Murray  
Senior Assistant Regional Counsel

Enclosures



Printed on Recycled Paper

cc: Bill Peterson, Air Permitting and Compliance Branch  
Terri Dykes, Attorney-Advisor, U.S. EPA Air Enforcement Division  
Parthy Evans, Stinson Leonard Street LLP  
Skipp Kistler, Vice President – Refinery Manager, Frontier El Dorado Refining LLC

**Attachment 1**  
**Frontier El Dorado Refining LLC/Clean Air Act Section 114 Request**

**Question 1**

- a) Confirm that the "Total Vent Gas to the West Flare," consists of all of the gas streams that flow to the flare, as defined in the Section 114 request. This should include, at a minimum, the waste and sweep gas (as described in Frontier's response), excess fuel gas, sweet hydrogen, purchased natural gas, and purge gas. If the data provided by Frontier was not the total Vent Gas, provide that data as described in Question 1 of the Section 114 request.
- b) Provide mass flow rate (lbs/hr) on an hourly basis of the "Vent Gas", as defined in the Section 114 request.
- c) Provide an example calculation describing how Frontier determined the mass and volumetric flow rate of the Vent Gas, and for clarity, explain how the volumetric flow for each stream in the Vent Gas was measured (i.e. by a flow meter, mass balance, etc.)
- d) Frontier states in the response that the transmitter and seal on the east flare is unreliable. The U.S. EPA reserves the right to obtain this information regarding the east flare in the future.
- e) Provide an explanation of what a virtual tag consists of, that was mentioned in the response.

**Question 2**

- a) Because Frontier provided concentrations of the FGRU compressed gas, "sweet flare" and excess fuel gas streams, but not the Vent Gas (as defined in the Section 114 letter), Frontier needs to provide the following information for the West Flare:
  - 1) Provide, on an hourly basis, the concentration of each constituent in the Vent Gas as described in Question 2 of the Section 114 request.
  - 2) Provide an example calculation of how the concentration of each constituent in the Vent Gas was determined.

**Question 3**

- a) As Frontier did not provide a copy of the analytical results (2009-2010), the U.S. EPA reserves the right to obtain this information in the future.

**Question 4**

- a) As Frontier only provided the heating value of the excess fuel gas stream, provide the hourly average net heating value, in Btu/scf of the "Vent Gas," as described in Question 4 of the Section 114 request, for the West Flare.
- b) Provide a narrative explanation and example calculation describing how you arrived at your response.

**Question 5**

- a) Provide an example calculation of how the total steam flow was determined, and confirm that the data provided is the total of all the steam that flows to the West Flare. If the data provided by Frontier was not the total of all the steam that flows to the West Flare, provide that data as described in Question 5 of the Section 114 request.

**Question 6**

- a) Frontier did not answer this question in the manner specified in the Section 114 request (pound of steam/pound of Vent Gas). For the West Flare, for each hour required in response to Question 1, provide the hourly average steam-to-Vent Gas ratio (in units of pound of steam/pound of Vent Gas) as described in Question 6 of the Section 114 request.
- b) Provide a narrative explanation and example calculations describing how you arrived at your response.

**Questions 11 and 12**

- a) Frontier concluded that there were no responsive documents to this question based on Frontier's own definition of "research or studies". It is EPA's intent for "research and studies" to include routine engineering work that involved an evaluation of the capacity, operation, and/or steam addition to the flares. This would include, at a minimum, engineering work and safety evaluations (either internal or external) involved with the assessment of the Flares' capability to combust and/or destroy chemical compounds contained in waste gases or streams routed to the flares from refinery process units which would include, but not limited to the Fluid Catalytic Cracking Unit (FCCU), the Coker Unit, Hydrotreating Unit #5 (HTU5), and the hydrogen plant.

Describe in detail any research or studies conducted or reviewed by Facility personnel or at the direction of Facility personnel regarding the West and East Flares (the flare system). Provide copies of any and all Documents in your possession, custody, or control of the research or studies.

To assist in defining the scope of this request, provide documents from January 1, 2005 to May 31, 2014.

**Question 17**

- a) The U.S. EPA reserves the right to obtain this information in the future.

**Question 19**

- a) Provide the federal and/or state regulations that apply to the East and West Flares (the flare system) as determined by Frontier. Frontier set forth the "federal and state rules that apply to the flare system, as determined by the Kansas Department of Health and Environment..." If the Flares (flare system) are subject to NSPS Subpart Ja, provide the date the Flares became subject to NSPS Ja. In addition, specify the applicable opacity regulations that applies to the Flares (i.e. KAR 28-19-650(a) (2) or (3)).

**Question 22**

- a) EPA requests that Frontier provide a diagram of each flare system at the Facility that shows the locations of each pressure, flow, net heating value, molecular weight or constituent concentration measurement, knockout drum, water seal, purge gas, sweep gas, and supplemental gas injection point (the diagram does not have to be a P&ID diagram). In other words, provide a response to the first sentence in Question 22. EPA reserves the right to obtain the remainder of the information requested in that paragraph in the future.

**Question 26**

- a) As no data was provided for the east flare, the U.S. EPA reserves the right to obtain the information in the future.

**Questions 36, 42 and 48**

- a) Frontier did not provide a list (the names) of the refinery process units that corresponds to the time periods when any of said units were in the process of starting up, shutting down, or experiencing a malfunction. Provide a list (the names) of the refinery process units that were in startup, shut down or malfunction mode with the respective time periods they were in these SSM modes. Include the time periods that the units (by name) were sending off gas to the refinery flare header.



**ATTACHMENT 2**

United States Environmental Protection Agency  
Region 7  
11201 Renner Boulevard  
Lenexa, Kansas 66219

IN THE MATTER OF:

FRONTIER EL DORADO REFINING, LLC

Respondent

STATEMENT OF CERTIFICATION

I, \_\_\_\_\_, being first duly sworn, hereby certify that the entire response to the June 18, 2014 Clean Air Act Information Request in the above-captioned matter is true, accurate, and complete. I certify that the portions of this response which I did not personally prepare were prepared by persons acting on behalf of the Respondent, under my supervision and at my instruction, and that the information provided is true, accurate, and complete. I make this certification both on my own behalf, and on the behalf of the Respondent, as its authorized representative.

Dated: \_\_\_\_\_

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

